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AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application. Claims 1-22 and 28 have been amended herein; claims 23-27 have been cancelled without prejudice or disclaimer; and claims 29-33 have been newly added.

LISTING OF CLAIMS:

1. (Currently amended) A computer-implemented method of for facilitating long-running transactions of a business workflow process ~~modeling a business process having a plurality of transactions, comprising the steps of:~~
 - reducing a business process to a SLANG programming language;
 - dividing the reduced business process into at least one independent transaction and at least one parent interdependent transaction, the at least one parent interdependent transaction ~~comprising~~ comprises two or more child interdependent transactions;
 - ~~utilizing a first verb of a process algebra to represent the at least one independent transaction; and~~
 - ~~utilizing a second verb of the process algebra to represent the at least one parent interdependent transaction, the first and second verbs respectively employed to differentiate the at least one independent transaction from the at least one parent interdependent transaction operations;~~
 - executing the at least one independent transaction independently from the at least one parent interdependent transaction to increase throughput and decrease latency of the business process, the at least one independent transaction commits upon successful execution;
 - executing the children interdependent transactions independently from each other, wherein the at least one parent interdependent transaction commits when the last child interdependent transaction commits; and
 - transferring committed data associated with the at least one independent transaction and the at least one parent interdependent transaction to a computer component for further processing.

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2. (Currently amended) The method of claim 1, the children interdependent transactions respectively include one or more actions, the one or more actions are concurrently executed independently from each other, further comprising a step of representing the business process as constraints on synchronization of the at least one independent operation and the set of interdependent operations by distinguishing between synchronization of the at least one independent operation and synchronization of the set of interdependent operations.
3. (Currently amended) The method of claim 21, respective children interdependent transactions commit when all of their associated actions are completed, further comprising a step of expressing synchronization constraints based on completion of the set of interdependent operations.
4. (Currently amended) The method of claim 1, further comprising a step of relaxing explicitly defining transaction boundaries of the operations for the at least one independent transaction and the children interdependent transactions as a function of a number of actions within the at least one independent transaction and the children interdependent transactions, respectively, in order to increase define a granularity of the operations at an action level.
5. (Currently amended) The method of claim 1, the children interdependent transactions are concurrently executed in isolation from each other, further comprising the step of reducing the process algebra to a programmable language.
6. (Currently amended) The method of claim 15, further comprising employing separate machines to execute the at least one independent transaction and the at least one parent interdependent transaction, the programmable language having an XML syntax.

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7. (Currently amended) A system that uses a an XML-based programming language process algebra for facilitating implementation of modeling of business processes comprised of a plurality of business operations being representable at a transaction level and an action level, the system comprising within a computer-readable medium that embodies a plurality of computer-executable components, the components comprising:

a user interface component; and

a plurality of model components accessible through the user interface, the plurality of model components component and adapted to allows a user to create a model of a business process and reduce the model via a SLANG programming language, and comprises the plurality of model components comprising a distinguishing model component for distinguishing between concurrent autonomous business operations and concurrent interdependent business operations.

8. (Currently amended) The system of claim 7, further comprising a transaction grouping model component that groups for grouping business operations into concurrent interdependent transactions.

9. (Currently amended) The system of claim 8, the grouping model component ~~providing~~ provides synchronization of concurrent interdependent transactions based on the completion of the concurrent interdependent transactions.

10. (Currently amended) The system of claim 7, further comprising an action grouping model component that groups for grouping business operations into concurrent interdependent actions.

11. (Currently amended) The system of claim 10, the action grouping model component ~~providing~~ provides synchronization of concurrent interdependent actions based on completion of the concurrent interdependent actions.

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12. (Currently amended) ~~The system of claim 7. A system that uses a process algebra for facilitating modeling of business processes comprised of a plurality of business operations being representable at a transaction level and an action level, the system comprising a computer-readable medium that embodies a plurality of computer-executable components, the components comprising:~~

~~— a user interface component; and~~

~~— a plurality of model components accessible through the user interface component, the plurality of model components adapted to facilitate a user in creating a model of a business process, the plurality of components further comprising at least one boundary establishing component for defining transaction boundaries.~~

13. (Currently amended) The system of claim 12, the at least one boundary establishing component includes ~~including~~ a component for establishing concurrent operations.

14. (Currently amended) The system of claim 12, the at least one boundary establishing component includes ~~including~~ a component for establishing sequential operations.

15. (Currently amended) The system of claim 12, further comprising a compensation ~~model~~ component that compensates ~~adapted to compensate~~ committed interdependent concurrent transactions and is invoked ~~being invoked~~ upon the occurrence of a failed interdependent concurrent transaction.

16. (Currently amended) The system of claim 15, the interdependent concurrent transactions being ~~are~~ children transactions in a parent transaction, wherein the compensation ~~model~~ component is invoked by the parent transaction.

17. (Currently amended) The system of claim 15, the compensation ~~model~~ component calls ~~calling~~ compensation routines within the committed interdependent concurrent transactions.

18. (Currently amended) The system of claim 15, the compensation ~~model~~ component calls ~~calling~~ compensation routines within the failed interdependent concurrent transaction.

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19. (Currently amended) The system of claim 18, the compensation routines ~~utilize~~ utilizing information within the committed interdependent concurrent transactions.

20. (Currently amended) The system of claim 15, the compensation ~~model~~ component calls ~~calling~~ compensation routines within the failed interdependent concurrent transaction based on information on the committed interdependent concurrent transactions stored within a database.

21. (Currently amended) The system of claim 13, the computer readable medium resides ~~residing~~ on a computer system.

22. (Currently amended) The system of claim 7. ~~A system that uses a process algebra for facilitating modeling of business processes comprised of a plurality of business operations being representable at a transaction level and an action level, the system comprising a computer-readable medium that embodies a plurality of computer-executable components, the components comprising:~~

~~— a user interface; and~~

~~— a plurality of modeling components accessible through the user interface and adapted to allow a user to create a model of a business process,~~ the plurality of components further comprising a component for defining concurrent synchronizing constraints as occurring upon completion of the autonomous operations.

23-27. (Cancelled)

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28. (Currently amended) A system that uses a SLANG programming language process algebra for representing business ~~processes as constraints on the synchronization of a plurality of autonomous and interdependent business operations, the business processes represented as computer-executable instructions embodied in a computer-readable medium, the system~~ comprising:

means for distinguishing between synchronization of autonomous concurrent operations from interdependent concurrent operations, the autonomous concurrent operations and the interdependent concurrent operations are represented in a SLANG programming language;

means for expressing synchronization constraints on completion of autonomous concurrent operations; and

means for allowing association of transaction operations and groups of business operations.

29. (New) The method of claim 1, further comprising failing the at least one parent interdependent transaction when at least one of its children interdependent transactions does not commit, and compensating the at least one failed child transaction.

30. (New) The method of claim 29, the at least one parent interdependent transaction invokes a compensation routine within the at least one failed child transaction that compensates the at least one failed child transaction.

30. (New) The method of claim 1, further comprising compensating the at least one independent transaction when at least one of the children interdependent transactions does not commit.

32. (New) The method of claim 1, further comprising compensating the at least one parent interdependent transaction when it does not commit and all of its children interdependent transactions commit.

33. (New) The method of claim 32, the at least one parent interdependent transaction invokes its own compensation routine.